

# TW@N

THIS WEEK @ NASA



1  
00:00:00,667 --> 00:00:03,470  
A commercial crew spacecraft's  
historic test mission ...

2  
00:00:03,603 --> 00:00:07,774  
Recognizing the leadership of our James  
Webb Space Telescope team ...

3  
00:00:07,774 --> 00:00:11,745  
And a small spacecraft prepares  
for a unique mission around the Moon ...

4  
00:00:11,745 --> 00:00:14,881  
a few of the stories  
to tell you about – This Week at NASA!

5  
00:00:15,115 --> 00:00:17,150  
"Approaching the International Space  
Station ...."

6  
00:00:17,150 --> 00:00:19,786  
On May 20, Boeing's uncrewed

7  
00:00:19,786 --> 00:00:24,090  
CST-100 Starliner spacecraft  
arrived at the International Space Station

8  
00:00:24,290 --> 00:00:27,694  
on the Orbital Flight Test-2  
or OFT-2 mission

9  
00:00:27,861 --> 00:00:30,096  
for NASA's Commercial Crew Program.

10  
00:00:30,096 --> 00:00:31,698  
"Soft capture confirmed."

11  
00:00:31,998 --> 00:00:35,101  
"Boeing's Starliner spacecraft

completes its historic first docking

12

00:00:35,135 --> 00:00:38,872

to the International Space Station,  
opening a new avenue of access for crews

13

00:00:38,872 --> 00:00:40,540

to the orbiting laboratory.”

14

00:00:40,540 --> 00:00:43,343

The next day – another first for Starliner,

15

00:00:43,476 --> 00:00:47,514

thanks to the efforts of NASA astronauts  
Kjell Lindgren and Bob Hines.

16

00:00:47,514 --> 00:00:51,451

"All right – and it looks like  
the hatch is open to the Starliner.

17

00:00:51,718 --> 00:00:55,855

Bob Hines is the first astronaut  
to enter Starliner in orbit.”

18

00:00:55,855 --> 00:00:59,192

The Starliner spent several days  
at the station, during

19

00:00:59,192 --> 00:01:03,630

which time teams conducted  
a series of planned tests, and the station

20

00:01:03,630 --> 00:01:07,067

crew transferred several hundred  
pounds of cargo and supplies.

21

00:01:07,500 --> 00:01:12,172

Starliner undocked from the station  
on May 25 and returned to Earth later

22  
00:01:12,172 --> 00:01:16,810  
the same day, making a landing  
at White Sands Space Harbor in New Mexico.

23  
00:01:17,277 --> 00:01:20,046  
The OFT-2 mission was designed to test

24  
00:01:20,046 --> 00:01:23,016  
the end-to-end capabilities  
of the Starliner system

25  
00:01:23,283 --> 00:01:26,786  
to safely transport astronauts  
to and from the space station.

26  
00:01:28,088 --> 00:01:30,690  
Gregory Robinson,  
the program director for NASA's

27  
00:01:30,690 --> 00:01:34,627  
James Webb Space  
Telescope, was named to the TIME100 -

28  
00:01:34,861 --> 00:01:39,766  
the magazine's annual list of the world's  
100 most influential people and leaders.

29  
00:01:40,233 --> 00:01:45,505  
Robinson began his career at NASA in 1989  
and joined the Webb team in 2018.

30  
00:01:45,939 --> 00:01:48,541  
In his current role,  
he oversees what will be

31  
00:01:48,541 --> 00:01:51,511  
the premier space observatory  
for the next decade.

32

00:01:51,978 --> 00:01:56,549

The Webb telescope will explore every phase of 13.5 billion years

33

00:01:56,549 --> 00:02:00,854

of cosmic history to help us understand our place in the universe.

34

00:02:01,721 --> 00:02:04,424

The Cislunar Autonomous Positioning System

35

00:02:04,424 --> 00:02:08,461

Technology Operations and Navigation Experiment, or CAPSTONE

36

00:02:08,461 --> 00:02:12,098

mission is targeted for launch no earlier than June 6.

37

00:02:12,599 --> 00:02:15,835

It is a collaboration between NASA and industry

38

00:02:16,002 --> 00:02:21,241

that will use a microwave oven-sized CubeSat to test a unique elliptical orbit

39

00:02:21,241 --> 00:02:25,178

around the Moon, formally known as a near rectilinear halo orbit.

40

00:02:25,945 --> 00:02:28,982

The mission will help reduce risk for future spacecraft,

41

00:02:29,115 --> 00:02:33,887

including Gateway, a Moon-orbiting outpost for NASA's Artemis program,

42

00:02:34,053 --> 00:02:37,090

by validating innovative  
navigation technologies

43

00:02:37,290 --> 00:02:41,227

and verifying the dynamics  
of this halo-shaped orbit.

44

00:02:41,227 --> 00:02:46,699

The NASA Innovative Advanced Concepts,  
or NIAC program selected

45

00:02:46,699 --> 00:02:50,770

a new solar sail concept for development  
toward a demonstration mission.

46

00:02:51,337 --> 00:02:55,175

The solar sail, which uses  
a property of light called diffraction

47

00:02:55,175 --> 00:02:59,979

to make more efficient use of sunlight,  
could carry science to new destinations.

48

00:03:00,480 --> 00:03:03,850

For more information  
about NIAC and NASA's investments

49

00:03:03,850 --> 00:03:07,987

in space technology,  
visit: [nasa.gov/spacetech](http://nasa.gov/spacetech).

50

00:03:09,055 --> 00:03:12,091

Our Ingenuity helicopter on Mars captured

51

00:03:12,091 --> 00:03:15,862

this black-and-white footage  
during its record-breaking 25th flight.

52

00:03:16,329 --> 00:03:18,798

The flight, which took place on April 18,

53

00:03:19,065 --> 00:03:22,602

was also Ingenuity's  
longest and fastest flight to date.

54

00:03:23,102 --> 00:03:28,741

The rotorcraft traveled over 2,300 feet  
and reached a speed of 12 mph.

55

00:03:29,642 --> 00:03:32,645

That's what's up this week  
@NASA ... For more on these